

# **EXPLANATION OF UNITS**

# **Intrusive Rocks**

Mesozoic

Mafic dike. Reddish-brown weathering, black basaltic dikes.

Trachyte dike. Feldspar-bearing dikes are dark gray, weather chocolatebrown. Nepheline-bearing dikes are bluish gray, weather pale brown. Associated with the Rattlesnake Mountain igneous complex in neighboring Raymond quadrangle to the east.

Carboniferous

# Rocks of the Sebago pluton

Biotite granite. Medium-grained biotite granite with or without accessory Cbg muscovite, locally subporphyritic. Frequently associated with or gradational into pegmatitic stringers, segregations, and dikes. Associated with metasedimentary xenoliths and septa. Fine-grained variant interpreted as

marginal facies. **Cbg+m**-zones with extensive metasedimentary rock xenoliths.

Pegmatite. Biotite-muscovite granite pegmatite generally free of metasedimentary inclusions and occurring as irregularly shaped bodies.

**Two-mica granite.** Medium-grained equigranular, biotite-muscovite granite, white to pale pink, generally lacking metasedimentary inclusions. Locally pegmatitic. Demonstrably younger than biotite granite. Best developed in southwestern portion of quadrangle.

Cg + pa - zones of extensive aplite intrusion about small aplite bodies.

**Gray two-mica granite.** Fine-grained homogeneous, gray biotite-muscovite granite. Interpreted as marginal facies of Sebago granite.

Aplite. Garnet-muscovite granite aplite and associated garnet-muscovite granite pegmatite. Outcrops heterogeneous with gradational (cm-scale) contacts between aplite and pegmatite.

### **Stratified Rocks** Ordovician or Silurian (?)

**Migmatite.** Metasedimentary lithologies intimately injected lit-parlit by coarse-grained granite and pegmatite.

Metasedimentary rocks occurring chiefly as xenoliths and septa within granititc rocks, in particular biotite granite and pegmatite.

Biotite-quartz feldspar granofels.

SOp Schist and metawacke.

Calc-silicate rocks (including layered granofels and skarn

# **EXPLANATION OF SYMBOLS**

➤ Foliation - inclined, vertical. Joint - inclined, vertical.

> Outcrops without structural data. Symbols representing inclined planar

features are annotated with dip angles.

Contact. All contacts are solid where approximately placed, dashed where inferred, dotted where concealed, and queried where uncertain.

# **Bedrock Geology of the** Naples Quadrangle, Maine

Bedrock geologic mapping by John W. Creasy

Digital cartography by: Bennett J. Wilson, Jr. **Robert G. Marvinney** State Geologist

Cartographic design and editing by: **Robert D. Tucker** 

Funding for the preparation of this map was provided in part by the U.S. Geological Survey National Geologic Mapping Program, Cooperative Agreement No. 1434-94-A-01234.



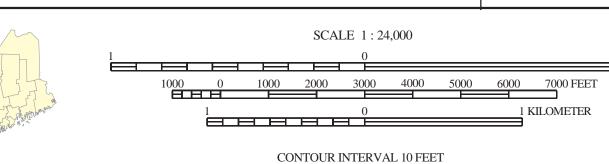
Quadrangle Location

# **Maine Geological Survey**

**Address**: 22 State House Station, Augusta, Maine 04333 **Telephone**: 207-287-2801 **E-mail**: mgs@maine.gov **Home page**: http://www.maine.gov/doc/nrimc/nrimc.htm

Open-File No. 96-4 1996

First color printing: February, 2004



SOURCES OF INFORMATION

Topographic base from U.S. Geological Survey Naples quadrangle, scale 1:24,000 using standard U.S. Geological Survey topographic map symbols. Bedrock mapping by John W. Creasy completed during the 1994 field The use of industry, firm, or local government names on this map is for location purposes only and does not impute responsibility for any present or potential effects on the natural resources.